Ancient Brews: Ethiopia and the Consumption of Tej.

A near universal phenomenon that has been seen across history and cultures around the world is the production of fermented beverages. Humans have continuously discovered ways to make fermented beverages from sugar sources available in their local environments, providing ancient populations not only calories but also B vitamins and proteins from residues of the substrates, the fermenting yeasts, and other microorganisms (Steinkraus, 1983; Bahiru, 2000). In Ethiopia, a honey wine commonly known as T'ej has been consumed by Ethiopians for well over 4,000 years and is one of the oldest fermented brews still consumed. Fermentation of T'ej, like other traditionally fermented beverages, relies on the microorganisms present in the substrates, fermentation vats or equipment. However, T'ej making deviates in its brewing methods in key ways from other beverages. Specifically, yeast produces beta amylase but does not produce alpha amylase, though both enzymes are present in the brew; therefore, I hypothesize that there are as-yet unidentified bacteria present to produce this amylase over time, as in the case for sourdough bread starters, and that these bacteria are present on the surface of gesho (*Rhamnus prinoides*) twigs that are included in the brewing process. Here, I present the results of a study to in which I identify the bacteria present on gesho twigs obtained from local Ethiopian groceries in Atlanta and more accurately determine whether *Rhamnus prinoides* (gesho) is the primary contributor to the saccharification of starch media in the T'ej brewing process. This will provide significant insights into one of the oldest brewing traditions in the world, and its significance to brewing culture past and present.